

JUL 20 2005

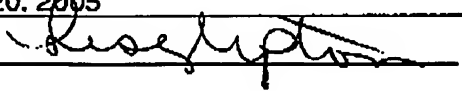
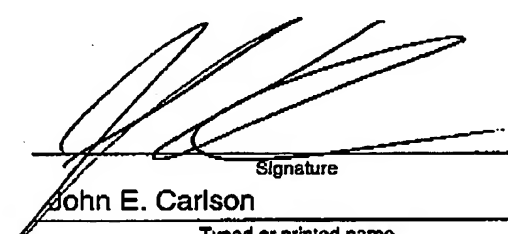
Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

Approved for use through 10/30/2005. OMB 0651-000x

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 67,021-005/03-667	
CERTIFICATE OF FACSIMILE I hereby certify that this Pre-Appeal Brief Request For Review, Argument, and Notice of Appeal are being facsimile transmitted to (571) 273-8300. on <u>July 20, 2005</u> Signature <u></u> Typed or printed name <u>Lesley Upton</u>		Application Number <u>10/754,036</u>	Filed <u>1/8/2004</u>
		First Named Inventor <u>Sean F. Wu</u>	
		Art Unit <u>2856</u>	Examiner <u>Jacques M. Saint-Surin</u>
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. <u>37,794</u> Registration number</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p> <p> Signature <u>John E. Carlson</u> Typed or printed name <u>(248) 988-8360</u> Telephone number <u>July 20, 2005</u> Date</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.</p> <p><input checked="" type="checkbox"/> Total of <u>3</u> forms are submitted.</p>			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AP, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-0199 and select option 2.

RECEIVED
CENTRAL FAX CENTER

JUL 20 2005

Serial No. 10/754,036

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Sean F. Wu
SERIAL NO.: 10/754,036 GROUP ART: 2856
FILED: 1/8/04 EXAMINER: Jacques M. Saint Surin
FOR: RECONSTRUCTION OF TRANSIENT ACOUSTIC RADIATION
FROM A FINITE OBJECT SUBJECT TO ARBITRARILY
TIME-DEPENDENT EXCITATION

ATTORNEY DOCKET NO: 67,021-005/03-667

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR PRE-APPEAL BRIEF REVIEW

ARGUMENT

The Examiner has rejected claims 1-18 under the Judicially created Doctrine of Obviousness-Type Double Patenting over claims 1, 9, 17 and 18 of Applicant's prior patent, U.S. Patent No. 6,615,143. The Examiner has not set forth a *prima facie* case of obviousness-type double patenting. As explained more fully below, the present claims recite a *transient* analysis, while the prior patent claims do not.

While pending, Applicant's patent was published more than one year before the filing date of the present application. However, there is nothing in the claims or disclosure of the prior patent that teaches performing the transient analysis claimed here.

The Examiner has acknowledged that the present claims recite analysis of transient acoustic radiation and that the patent claims do not. But the Examiner has not offered sufficient

Serial No. 10/754,036

motivation or pointed to any sort of enabling disclosure of using the method claimed in the patent for performing a transient analysis.

The patent's disclosure was directed toward a steady state (or "harmonic") analysis. The claims of the patent are not limited to steady state analysis, however, and are broad enough to encompass either steady state or transient analysis, even though the patent does not provide an enabling disclosure of transient analysis. The Examiner focuses on this point in his double-patenting rejection (from the Advisory Action):

13. ☒ Other: Applicant's argument has been fully considered but they are not persuasive. The claims of the prior patent do not disclose or recite the steady state or harmonic analysis as argued by applicant. Therefore, the claims stand rejected under obviousness double patenting as indicated in the last office action.

However, it is not relevant whether the claims of the patent are limited to steady state analysis. What is relevant is the fact that the claims of the patent do not recite *transient* analysis, even if they are broad enough to cover transient analysis. The "transient" limitations in the claims of the present application make the present claims narrower than the patent claims in a non-obvious manner. It is believed that the Examiner is evaluating whether the patent claims would cover the present claims, rather than vice versa.

The independent claims all recite transient analysis (one way or another) as indicated below:

- I. A method for reconstructing transient acoustic radiation from an object including the steps of:
 - a) measuring *transient* acoustic pressure at a plurality of measurement points around the object subject to an *arbitrarily time-dependent* excitation; and
 - b) reconstructing the *transient* acoustic pressure at points other than the measurement points based upon the measurements at the plurality of measurement points.

Serial No. 10/754,036

9. A system for reconstructing an acoustic field comprising:
a plurality of transducers each measuring acoustic pressure at a measurement point around a noise source generating *transient acoustic radiation*; and
a computer reconstructing *transient* acoustic pressure at points other than the measurement points based upon the acoustic pressure as measured by the transducers.

17. A computer-readable storage medium having a computer program stored thereon, which when executed by a computer performs the steps of:

- a) receiving signals indicating sound at a plurality of measurement points around a noise source generating *transient* acoustic radiation; and
- b) reconstructing a *transient* acoustic field at points other than the measurement points based upon the signals.

18. A system for reconstructing an acoustic field comprising:
a plurality of transducers each measuring acoustic pressure at a measurement point around a noise source generating *transient acoustic radiation*; and

means for reconstructing *transient acoustic pressure* at points other than the measurement points based upon the acoustic pressure as measured by the transducers.

Applicant's patent does not claim or disclose measuring *transient* acoustic pressure or that the object is subject to "*arbitrarily time dependent* excitation," as claimed. Nor does Applicant's patent claim or disclose, "reconstructing the transient acoustic pressure," as claimed. The transient analysis of the present invention is a significant, non-obvious change over Applicant's prior claimed invention.

Contrary to the Examiner's statement (page 4 of Final Rejection), this is not merely a "variation in the words of the limitations of the claims which are performing the same functions." Analyzing the transient acoustics is a much different problem from analyzing the steady state or harmonic acoustics, with completely different results.

Serial No. 10/754,036


Of course, the *existence* of transient acoustic radiation was known prior to the present application (and prior to the patent). The Examiner simply states without proof that the determination of transient acoustic pressure would be obvious based upon Applicant's prior patent. This is untrue. In fact, the techniques described in Applicant's patent do not provide transient acoustic radiation analysis and could not be used to provide transient acoustic radiation analysis without the patentable modifications, such as are described in the present application.

For the above reasons, the Examiner has not set forth a *prima facie* case of obviousness-type double patenting. Therefore, the claims should be allowed.

It is believed that no fees are due; however, if any fees are due please charge all fees to Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds, P.C.

Respectfully submitted,

CARLSON, GASKEY & OLDS



John E. Carlson
Registration No. 37,794
400 W. Maple, Suite 350
Birmingham, MI 48009
(248) 988-8360

Dated: July 20, 2005